**Novel composite zinc-alginate hydrogels with activated charcoal aimed for potential applications in multifunctional primary wound dressings**

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**Supplementary material**



Fig.1S. Calibration curve for detection of AC

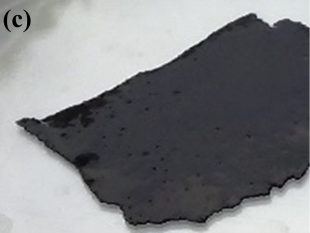


Fig.2S. Composite ZnA/AC hydrogel in the form of(a) fibre; (b) sheet; (c) film



Figure 3S. Release profiles of Zn2+ from ZnA and ZnA/AC in physiological saline solution at 37 °C during the overall period of 5 days and during the initial period of 8 h (inset)



Figure 4S. Optical micrographs of the surface of ZnA beads immersed in saline solution at: (a)the initial time point; (b) after 24 h; (c) after 48 h; (d) after 5 days; (scale bar = 0.5 mm)